

What is claimed is:

1. An information communications system comprising a broadcasting device transmitting a broadcasting signal and a receiving device receiving the broadcasting signal from the broadcasting device via a broadcasting path,

wherein the broadcasting device comprises: a broadcasting transmission part for transmitting the broadcasting signal simultaneous to a plurality of receiving devices via the broadcasting path; and a control data transmission part for transmitting operation control data controlling an operation mode of the receiving device through a communications path which is different from the broadcasting path; and

wherein the receiving device each comprises: a broadcasting receiving part for receiving the broadcasting signal via the transmission path; a control data receiving part for receiving the operation control data from the control data transmission part through the communications path; and a control part performing a control process including a decoding process in which the broadcasting signal received by the broadcasting receiving part are decoded and the decoded signals are outputted to a user, the control part changing the control in accordance with the operation control data received by the control data receiving part.

2. A broadcasting device simultaneously performing broadcasting to a receiving device and designating an operation mode related with reception of the broadcasting to a desired receiving device, the broadcasting device comprising:

a broadcasting transmission part for transmitting a broadcasting signal simultaneous to a plurality of receiving devices via the broadcasting path; and

a control data transmission part for transmitting operation

control data controlling an operation mode of the receiving device through a communications path which is different from the broadcasting path.

5 3. A receiving device, for receiving a broadcasting signal transmitted from a broadcasting device via a broadcasting path, and for decoding the received signals and outputting the resultant signals, the receiving device comprising:

10 a broadcasting receiving part for receiving the broadcasting signal via the broadcasting path;

 a control data receiving part for receiving the operation control data from the broadcasting device through a communications path which is different from the broadcasting path; and

15 a control part performing a control process including a decoding process in which the broadcasting signal received by the broadcasting receiving part are decoded and the decoded signals are outputted to a user; and

20 wherein the control part changes the control in accordance with the operation control data received by the control data receiving part.

25 4. A control program realizing a receiving device, for receiving a broadcasting signal transmitted from a broadcasting device via a broadcasting path, for decoding the received signal, and for outputting the decoded signal, using a computer, the program comprising the steps of:

 performing a control process including a decoding process in which the broadcasting signal received by the broadcasting receiving part are decoded and the decoded signals are outputted to a user; and

30 changing the control in accordance with operation control data received through a communications path which is different from the

broadcasting path.

5. A computer-readable storage medium for storing the program of claim 4.

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6. The receiving device in accordance with claim 3, wherein the communications path includes one of a public telephone network and the Internet communications network.

10 7. The receiving device in accordance with claim 6, wherein the operation control data is transmitted to the receiving device as an electronic mail.

15 8. The receiving device in accordance with claim 7, wherein the operation control data is transmitted in a form of an electronic mail installing the operation control data in its header region.

20 9. The receiving device in accordance with claim 7, wherein the broadcasting device notifies a specific receiving device via the broadcasting path that the broadcasting device has sent an electric mail toward the specific receiving device through the communications path, and wherein the receiving device, after confirming the notification, establishes a communication link to obtain the electric mail.

25 10. The receiving device in accordance with claim 3, wherein the receiving device changes the control assigned to each operation button in accordance with the received operation control data.

30 11. The receiving device in accordance with claim 10, wherein the operation control data includes a description for making a reservation for recording a program to be transmitted via the broadcasting path and

another description for assigning a function of making a reservation for recording the program to which of the operation button,

and wherein the receiving device assigns the function of making a reservation for recording the program to one of the operation buttons in accordance with the description of the operation control data.

12. The receiving device in accordance with claim 11, wherein the operation control data is sent from the broadcasting device to the receiving device in a form of an electronic mail,

and wherein the receiving device displays a recommended program in accordance with a description of informing a recommended program included in the electronic mail and displays that the function of making a reservation for recording is assigned to which one of the operation buttons in accordance with the operation control data.

13. The receiving device in accordance with claim 3, wherein the receiving device performs a control process in which a determination is made whether viewing of a predetermined broadcasting program is allowed or not in accordance with the received operation control data.

14. The receiving device in accordance with claim 13, wherein a user of the receiving device sends a request of permission for viewing the broadcasting program to the broadcasting device through the communications line by operating the receiving device,

and wherein the broadcasting device sends operation control data for allowing view of the broadcasting program to a receiving device upon receipt of the request in accordance with predetermined criteria.

15. The receiving device in accordance with claim 13, wherein the broadcasting program is a quiz program,

wherein a user sends an answer of a quiz to the broadcasting

device through the communications path by operating the receiving device,

and wherein the broadcasting device sends operation control data for allowing view of the quiz program only to a predetermined receiving device based on a judgement in which a determination is carried out whether the received answer is correct or not.

16. The receiving device in accordance with claim 3, wherein the operation control data includes one of a program and data, necessary for outputting content of a program in accordance with the broadcasting signal transmitted via the broadcasting path,

and wherein the receiving device outputs the content of the program using one of the program and the data.

17. Electronic mail data transmitted from a broadcasting device to a receiving device through a communications path, which is different from a broadcasting path, the data comprising:

a body region describing content of the electronic mail; and

an auxiliary region describing data necessary for transmitting the electronic mail;

wherein operation control data for controlling an operation mode of the receiving device is included into the auxiliary region.

18. A computer-readable storage medium for storing the electronic mail data of claim 17.

19. The electronic mail data in accordance with claim 17, wherein the operation control data is data for controlling a user interface of the receiving device.

20. A communications method using a broadcasting device which

transmits a broadcasting signal to a receiving device which receives the broadcasting signal from the broadcasting device via a broadcasting path, the method comprising the steps of:

providing a communications path, through which communications
5 between the broadcasting device and the receiving device can be performed, separate from the broadcasting path;

at the broadcasting device: transmitting operation control data for controlling an operation mode of the receiving device; and

at the receiving device: receiving the operation control data; and
10 changing control to the broadcasting signal received via the broadcasting path in accordance with the operation control data.

21. An electronic mail system in which a transmission device transmits an electronic mail to a receiving device, and the receiving
15 device outputs the received electronic mail for a user,

wherein the transmission device transmits operation control data, for controlling a user interface of the receiving device when a control related with a body of the electronic mail is performed at the receiving device, together with the body of the electronic mail so as to be included
20 in the body,

and wherein the receiving device outputs the body of the received electronic mail to the user and constructs a user interface for performing a control related with the body of the electronic mail in accordance with the received operation control data.

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22. A transmission device for transmitting an electronic mail to a receiving device, wherein the transmission device transmits operation control data, for controlling a user interface of the receiving device when a control related with a body of the electronic mail is performed at the
30 receiving device, together with the body of the electronic mail so as to be included in the body.

23. A program realizing a transmission device, for transmitting an electronic mail to a receiving device, using a computer, the program comprising the step of:

5 transmitting operation control data, for controlling a user interface of the receiving device when a control related with a body of the electronic mail is performed at the receiving device, together with the body of the electronic mail so as to be included in the body.

10 24. A computer-readable storage medium for storing the program of claim 23.

15 25. A receiving device for receiving an electronic mail, wherein the receiving device outputs a body of the received electronic mail to a user and constructs a user interface for performing a control related with the body of the electronic mail in accordance with operation mode data transmitted with the body of the electronic mail.

20 26. A program realizing a receiving device for receiving an electronic mail, using a computer, the program comprising the steps of:
 outputting a body of the received electronic mail to a user; and
 constructing a user interface for performing a control related with the body of the electronic mail in accordance with operation control data transmitted with the body of the electronic mail.

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27. A computer-readable storage medium for storing the program of claim 26.

30 28. The program of claim 23, wherein the operation control data includes data for setting function of an operation button of the receiving device.

29. Electronic mail data transmitted from a broadcasting device to a receiving device, wherein the electronic mail data includes a body region describing content of the mail and an auxiliary region describing
5 data necessary for transmitting the electronic mail,

and wherein operation control data for controlling an operation mode of the receiving device is included into the auxiliary region.

30. A computer-readable storage medium for storing the electronic
10 mail data of claim 29.

31. A communications method for transmitting an electronic mail from a transmission device to a receiving device, the method comprising the steps of:

15 at the transmission device: transmitting operation control data for controlling an operation mode of the receiving device together with a body of the electronic mail; and

at the receiving device: outputting the body of the received electronic mail; and constructing a user interface for performing a
20 control related with the body of the electronic mail in accordance with the received operation control data.